

SELECTION FOR CONSULTANTS BY THE WORLD BANK

REQUEST FOR EXPRESSIONS OF INTEREST

Electronic Submissions through World Bank Group eConsultant2

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ASSIGNMENT OVERVIEW

Assignment Title: Assessment of Technical Rooftop Solar PV Potential in Vietnam

Assignment Country:

- Vietnam

ASSIGNMENT DESCRIPTION

A. INTRODUCTION

The World Bank is leading work to prepare a 'Roadmap' for Vietnam to achieve its 12GW solar PV target by 2030, as set out in the Vietnam Renewable Energy Development Strategy and Vietnam's Revised Power Sector Development Plan VII. The Roadmap must assess the potential for different solar PV technologies, including ground mounted, rooftop and floating, identify the existing barriers to a solar PV scale up, and lay out a detailed pathway and proposes concrete actions for the Government of Vietnam.

In parallel, the World Bank will provide an estimate of rooftop solar PV potential and benefits in two of Vietnam's largest urban areas – Da Nang and Ho Chi Minh City – and support both cities in developing a commercially viable rooftop solar PV program.

To support this work the WB team is looking for a consulting firm to carry out a detailed assessment of the technical rooftop solar PV potential in terms of available suitable rooftop area (m²), total installed capacity (MW) and total potential generation (MWh) in both cities, plus an extrapolated and less detailed estimate for the entire country.

We believe it should be possible to carry out such an assessment using high resolution satellite imagery and some combination of machine learning and human input to identify suitable rooftops and quantify their potential for solar PV. We are therefore interested in innovative and cost effective approaches to undertaking this assignment, particularly those that have potential replicability in other countries. We are also interested in understanding how different approaches might utilize, or help to develop, open source solutions or tools, although this will not necessarily be a criteria for assessing the technical solutions proposed.

B. GENERAL SCOPE OF THE SERVICES

This assignment involves an assessment of the total technical rooftop solar PV potential across the total building stock in Da Nang and Ho Chi Minh City, broken down by public, private and other building categories (and in m², MW and MWh). Based on this assessment, the selected Vendor shall provide an estimate of the total, country-wide rooftop solar PV potential for Vietnam. The assessment should take into account solar irradiation data provided by the World Bank via the new Global Solar Atlas and, to the extent possible, shading, tilt and azimuth effect on rooftop suitability.

The selected Vendor would be responsible for:

- Deploying a cost-effective methodology to conduct the above outlined assessment;

- Obtaining existing data required for the assessment, either through international or Vietnamese sources. No primary data collection (LiDAR, surveys, solar data measurements, or similar) is envisaged;
- Analysis of key conclusions from the Da Nang and Ho Chi Minh City detailed assessment, and the country-wide estimate;
- Providing a report summarizing the total technical rooftop solar PV potential across the total building stock and break-downs for public, private and other building categories (in M2, MW and MWh);
- Providing web-based and printed maps of Da Nang and Ho Chi Minh City identifying the rooftops deemed suitable for solar PV development;
- Transferring any tools developed to the Client, including any training required to use them, so that they may carry out their own analysis.

Full Terms of Reference (TOR) will be issued with the Request for Proposals (RFP) package, and will contain a more detailed description of the scope of services to be provided and the technical specifications taking account of the feedback and suggestions provided by Vendors at the REOI stage.

C. EXPRESSION OF INTEREST & INFORMATION

Consultants are invited to submit Expressions of Interest (EOI) for this selection, which shall include:

- Outline of the Consultant's (or Consortium's) core business and experience in carrying out remote sensing, geospatial analysis and machine learning at it relates to this assignment;
- Summary description of their proposed approach for carrying out the assignment;
- Description of any data supplier relationships, preferences or restrictions they have in place;
- Confirmation of their ability to offer services across Vietnam;
- Key members of the Consultant's team and their relevant experience;
- Details of any international or Vietnam-specific partnerships or technical cooperation agreements;
- Details of the Consultant's size in terms of number of staff and annual turnover;
- Any comments or suggestions that the Consultant has on the approach being proposed or methodological considerations that the World Bank should take into account.

D. FIRM PROFILE

It is anticipated that Consultants responding to this EOI will be firms, or consortia of firms (with one firm designated as the lead vendor).

E. SUBMISSION REQUIREMENTS

The World Bank now invites eligible consultants to indicate their interest in being invited to submit a full proposal at the Request for Proposals (RFP) stage.

Interested Consultants must provide information indicating that they are qualified to perform the services, referring to the guidance above. Consultants may associate with other invited and non-invited firms to enhance their qualifications. The EOI submission shall be in the form of a single attached PDF proposal, including any annexes. Please note that the total size of this PDF file should be less than 5MB. We require that Consultants limit their EOI to a focused and tailored submission not to exceed five (5) pages, exclusive of CVs and suggestions/comments on the proposed approach/methodology, which can be included as annex material. EOI submissions that go beyond the five page limit WILL NOT BE REVIEWED beyond this point, which may negatively impact on the scoring that is given. The intention at this stage is to assess the suitability of each Consultant to be invited to the RFP stage, and so firms should focus on

responding to the criteria outlined in Section C above, and should keep their EOI submissions concise and to the point.

F. NOTES

Following the completion of the EOI stage, a shortlist of eligible consultants will be invited to the RFP stage, which will include a full technical and financial evaluation.

Interested consultants are hereby invited to submit expressions of interest.

Expressions of Interest of no more than 5 pages (excluding annexes) should be submitted as a single PDF attachment, in English, electronically through World Bank Group eConsultant2 (<https://wbgeconsult2.worldbank.org/wbgec/index.html>).